



**Office of Energy Programs  
Energy Systems Engineer  
State Facility Utility Management Section**  
Starting Salary Range: \$65,000 - \$90,000

**About the Tennessee Department of Environment and Conservation (TDEC)**

The Department exists to enhance the quality of life for citizens of Tennessee and to be stewards of our natural environment by:

- Protecting and promoting human health and safety.
- Protecting and improving the quality of Tennessee's land, air, and water.
- Conserving and promoting natural, cultural and historic resources.
- Providing a variety of quality outdoor recreational experiences.

TDEC has approximately 2,900 employees working across Tennessee supported by a total budget of more than \$300 million with funding from fees for services, state parks revenue, federal sources, and the state general fund. TDEC is the chief environmental and natural resource regulatory agency in Tennessee with delegated responsibility from the U.S. Environmental Protection Agency to regulate sources of air pollution, radiological health issues, solid and hazardous waste, underground storage tanks, water and groundwater pollution, and water supply. TDEC has a central office in Nashville and eight (8) regional offices across the state serving as the primary point of contact for their respective regions.

**About the Office of Energy Programs (OEP) – State Facility Utility Management (SFUM) Section**

TDEC OEP is designated as the State Energy Office for Tennessee under the U.S. Department of Energy's DOE State Energy Program (SEP). OEP oversees a variety of energy related initiatives and technical assistance programs that address the following TDEC and SEP long-term goals:

- Increase energy efficiency; reduce energy costs.
- Improve the reliability of electricity, fuel, and energy services delivery.
- Develop alternative and renewable energy resources.
- Promote economic growth with improved environmental quality.

To maximize utility savings opportunities for State facilities, the OEP SFUM section will be launched on January 1, 2017. SFUM will oversee various statutory responsibilities related to utility data and energy management for State facilities (Tenn. Code Ann. §§ 4-3-1012 and 4-3-1017-1019). SFUM will also oversee EmPower TN, an initiative to reduce energy consumption and costs across State-owned and managed facilities. The initiative includes a portfolio of energy efficiency projects (\$37.5 million budget) in varying stages of development and implementation and the implementation of a Utility Data Management (UDM) system and related metering infrastructure (\$6.2 million budget) to manage the State's utility bills and identify future opportunities. The UDM project encompasses over 7000 utility meters and accounts from over 300 different utility providers.

**Summary of Position**

This Executive Service position is located in TDEC's Central Office in Nashville and reports to the SFUM Director. The selected candidate will assist the SFUM Director and team with the development and implementation of a utility data and energy management program for State facilities, with a particular focus

on the delivery of technical engineering support and cost and performance analysis. The selected candidate will lead energy efficiency and renewable energy assessments of State facilities, oversee the implementation of energy measures supported through the program, and support ongoing benchmarking, project identification, and annual reporting of utility costs, usage, and savings related to capital projects or operational programs. This position will provide key support for the management and utilization of a UDM system, which will be implemented across all general government agencies and public higher education institutions.

### **Principal Duties and Responsibilities**

Conduct and/or coordinate facility audits and assessments for a diverse portfolio; prepare and/or review related reports, including recommendations for operation, maintenance, and capital projects; assist SFUM Director develop new or update existing strategic energy management plans to improve performance of said facilities. Identify energy use key performance indicators (KPIs) such as energy use per square feet, taking into consideration purpose / typical use of facility. Using these KPIs, identify high use buildings and potential utility cost savings measures / consumption reduction strategies.

- Assist UDM Project Manager with project execution; assist with preparation of UDM progress and “value” reports for EmPower TN Steering Committee and other stakeholders; assist SFUM team with metering and sub-metering needs analysis.
- Provide technical engineering support to agencies and higher education institutions to develop, evaluate, and/or facilitate implementation of utility, energy efficiency, renewable energy, and energy management projects; coordinate with the State Building Commission and State Architect’s Office to ensure said projects comply with the Tennessee High Performance Building Requirements.
- Coordinate with agencies and higher education institutions, as well as their capital projects teams, to ensure successful implementation of EmPower TN Energy Efficiency Projects.
- Lead annual analysis of cost and performance of EmPower TN Energy Efficiency Projects and other projects or programs to reduce utility costs and consumption.
  - Develop utility savings projections.
  - Conduct / oversee measurement and verification of the impacts of energy measures.
  - Research, analyze and apply useful life of systems and measures.
  - Conduct life-cycle cost analyses.
- Lead preparation of annual report on the activities and progress of SFUM, including savings information.
- Provide utility and energy management training for other SFUM staff and team of energy management liaisons.

### **Knowledge, Skills and Abilities**

- Demonstrated leadership, project management (e.g., RFI / RFQ / RFP development; contract management), and technical solution skills; ability to function in a highly demanding work environment and to work effectively in a collaborative team setting.
- Knowledgeable of current electric based energy efficiency, demand response, and renewable energy technologies, building science and building energy systems, high performance building standards, and building energy codes.
- Knowledgeable of principles and practices of measurement and verification of energy savings in commercial and institutional buildings, including the application of deemed savings and various engineering based savings calculation and verification methodologies.
- Able to analyze cost and performance of proposed and implemented energy efficiency and renewable energy measures and strategies, including performing engineering calculations and using deemed savings values where appropriate.
- A clear, concise communicator with excellent written communication skills.

- Is task oriented; able to break down work into the process steps; develops schedules and anticipates/adjusts for problems and roadblocks. Measures performance against goals and evaluates results.
- Knowledgeable of how state government works; understands the origin and reasoning behind key policies, practices and procedures.
- Dedicated to meeting expectations and requirements of internal and external customers. Establishes and maintains effective and cooperative relationships, earning trust and respect.
- Results oriented with a commitment to the TDEC and SFUM missions.

### **Education / Experience / Licenses - Certifications**

Applicants must possess a Bachelors' degree in engineering or related technical discipline, as well as six years of increasing responsibility implementing and/or managing utility, energy efficiency, renewable energy, and/or energy management programs or projects. Other degrees will be considered that support the requirements of the position. Professional Engineer (PE), Certified Energy Manager (CEM), Business Energy Professional (BEP), Professional Energy Manager (PEM), and/or Leadership in Engineering and Environmental Design (LEED) preferred.

All interested candidates should submit via email a resume, cover letter, and writing sample (e.g., data-focused strategy or planning proposals; energy assessments; strategic energy management plans or reports) to Beth Smith at ([TDEC.Careers@tn.gov](mailto:TDEC.Careers@tn.gov)). The position will remain posted until January 30, 2017. Questions regarding the position should be sent to [TDEC.Careers@tn.gov](mailto:TDEC.Careers@tn.gov).

### **Beth Smith, Talent Management Director**

Tennessee Department of Environment and Conservation  
William R. Snodgrass TN Tower, 22<sup>nd</sup> Floor  
312 Rosa L. Parks Avenue  
Nashville, TN 37243

TDEC is an AA/EEO/ADA employer.